

SYSTEMS AND METHODS FOR SERIAL PACKET SYNCHRONIZATION IN A VOICE PROCESSING SYSTEM

ABSTRACT OF THE DISCLOSURE

A serial packet sync encoder is used to encode a serial packet sync datastream. In an embodiment, the serial packet sync datastream is made up of the packet sync vector and a unique preamble bit sequence that is preselected. In another embodiment, the serial packet sync datastream is made up of a non-unique bit sequence. A serial packet sync transmitter is used to transmit the serial packet sync datastream. A serial packet sync receiver is provided for receiving the serial packet sync datastream. In an embodiment, the serial packet sync transmitter and the serial packet sync receiver are shift registers. In this way, the serial packet sync datastream can be transmitted and received using only a single pin. The serial packet sync datastream is useful for providing an indication that an event, such as a grant arrival, has occurred. A preamble comparator is provided to compare the received serial packet sync datastream and the preselected preamble to determine if the two match. In cases where a match is made, the packet sync vector is written into a holding register for access from other applications and or system components such as a digital signal processor.